

551.506 (261.1) WEATHER OF NORTH AMERICA AND ADJACENT OCEANS

NORTH ATLANTIC OCEAN

By F. G. TINGLEY

There was a noticeable increase in atmospheric activity over the North Atlantic in August as compared to July. Whereas in July the number of gales reported was smaller than normal for that month the number in August was markedly larger. While some of them were occasioned by the two disturbances of tropical origin, a considerable number was due to developments in the higher latitudes. The depression of the 16th to 19th in the northeastern Atlantic gave rise to widespread gales, the weather maps resembling those of the mid-winter season as regards the number and distribution of gales reported. The strength of the gales was less, however, ranging generally from force 7 to 9.

The general distribution of pressure throughout the North Atlantic for August is shown in an accompanying table. The departures from normal are moderate in amount and give no indication of the activity in air movement reported by vessels.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level 8 a. m. (75th meridian time), North Atlantic Ocean, August, 1926

Station	Average pressure	Departure ¹	Highest	Date	Lowest	Date
	Inches	Inch (°)	Inches		Inches	
Julianehaab, Greenland.	29.65		30.00	10th.....	29.30	6th.
St. Johns, Newfoundland.	29.90	-0.09	30.22	23d.....	29.56	21st.
Nantucket.....	30.01	+0.01	30.36	21st ⁴	29.76	8th.
Hatteras.....	30.02	-0.02	30.16	11th ⁴	29.88	6th.
Key West.....	30.02	+0.04	30.08	31st.....	29.94	Do.
Swan Island.....	29.87	-0.04	29.92	8th ⁴	29.80	21st.
New Orleans.....	30.00	+0.03	30.12	4th ⁴	29.60	26th.
Turks Island.....	30.06	+0.06	30.14	18th ⁴	29.96	5th.
Bermuda.....	30.14	+0.05	30.30	14th.....	29.66	6th.
Horta, Azores ⁵	30.21	+0.01	30.44	6th.....	29.96	26th.
Lerwick, Shetland Islands.....	29.85	+0.05	30.33	3d.....	29.93	21st.
Valencia, Ireland.....	30.05	+0.13	30.43	2d.....	29.60	20th.
London.....	30.08	+0.10	30.38	27th.....	29.75	21st.

¹ From normals shown on H. O. Pilot Chart, based on observations at Greenwich mean noon, or 7 a. m., 75th meridian.

² Mean of 27 days.

³ New station; no normal established.

⁴ And on other dates.

⁵ Observations made at 7 a. m.

The amount and distribution of fog conformed closely to the normal for August.

The month opened with generally quiet conditions over the northern part of the ocean, though vessels northwest of Ireland reported moderate to fresh gales, occasioned by a depression then approaching Iceland. In southern waters, however, a tropical disturbance was moving westward in mid-ocean. On the 1st the Dutch steamship *Bellatrix*, bound from Norfolk to Buenos Aires, and at Greenwich mean noon of that day, in 23° 34' N., 59° 01' W., came within the influence of this disturbance. In the course of the day storm winds were experienced, the center passing north and east of the vessel at 3:50 p. m. with the barometer recording 29.39 inches. The report from the *Bellatrix* is the earliest to show the existence of the disturbance. This hurricane passed near Bermuda on the 6th and was in the vicinity of Newfoundland on the 8th. It is reported to have caused a number of

casualties in the fishing fleets on the Grand Banks on the 7th and 8th. It is impossible to trace the further course of the storm with certainty, but it appears to have ultimately reached the eastern part of the ocean, though possibly in combination with some extratropical depression.

As the path of this hurricane crossed the trans-Atlantic steamer lanes a large number of vessels came under its influence. The masters of some of these vessels, appreciating the situation, exchanged weather reports by radio, using the information thus obtained to avoid the storm center. An indication of the amount of data available under such circumstances is afforded by a chart reaching the Weather Bureau from Capt. H. E. Maber, master of the British steamship *Emlynian*. On the 7th Captain Maber obtained reports from no less than 14 vessels within the area between 39° and 43° N., 59° and 66° W. From these reports he was able to plot the path of the approaching storm with a good degree of accuracy.

A detailed account of this hurricane appears elsewhere in the REVIEW.

As it pursued its course eastward across the ocean it was closely followed by a depression that developed near Newfoundland on the 12th. This latter, upon reaching the eastern North Atlantic developed into a vigorous storm, causing gales over an extensive area and involving many vessels, especially on the 17th to 19th. Representative reports on this storm will be found in the accompanying table of gales. In turn, this storm left a fresh depression forming in its wake, central on the 21st in 43° N., 40° W. The latter moved northeastward, reaching Iceland on the morning of the 24th, with readings at the center as low as 28.94 inches.

The daily weather maps of August disclose an interesting and rather unusual movement of an anticyclone during the last half of the month. On the 16th a small high appeared over the Dakotas, moving thence eastward with gradually increasing intensity until on the 20th and 21st it covered New England and the Canadian maritime Provinces. The central pressure on the 21st was 30.44 inches. Its subsequent course can be plainly traced across the Atlantic. On the 26th it was approaching the British Isles and on the 30th it largely dominated the weather of western and central Europe. On the 31st, as shown by the British map of that date, the center was over Russia, with a central isobar of 1,028 millibars (30.36 inches).

On the 22d a depression formed in the western Caribbean Sea and moved northwestward through the Yucatan Channel into the Gulf of Mexico. It developed into a hurricane, an account of which appears elsewhere in the REVIEW.

On the 27th a moderate depression formed east of Newfoundland, whence it moved slowly eastward, giving rise to moderate and fresh gales over the northern steamer routes. On the 29th, in conjunction with a depression from off the west coast of Spain, it formed a double-centered depression extending from Iceland to the region southwest of Ireland.